

COPY_10314P1-US_SeqListing

SEQUENCE LISTING

<110> Regeneron Pharmaceuticals, Inc.

<120> METHODS OF TREATING PRLR POSITIVE BREAST CANCER

<130> 10314P1-US

<141> Filed herewith

<160> 406

<170> FastSEQ for Windows Version 4.0

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<212> DNA

<213> Artificial Sequence

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<223> Synthetic

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ccaggcaagg ggctggagtg ggtggcactt atatcatttg atggaactac taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctatat 240
ctgcaaatga acagcctgag agctgaggac acggctgtgt atttctgtgt tggggctatt 300
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<210> 2

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 1           5           10          15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser His Tyr
          20          25          30
Gly Met Val Trp Val Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Val
          35          40          45
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COPY_10314P1-US_SeqListing

Ala Leu Ile Ser Phe Asp Gly Thr Thr Lys Tyr Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Phe Cys
85 90 95
Val Gly Ala Ile Ala Ala Ala Phe Asp Leu Trp Gly Arg Gly Thr
100 105 110
Leu Val Thr Val Ser Ser
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Gly Phe Thr Phe Ser His Tyr Gly
1 5

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atatcatttg atggaactac taaa

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COPY_10314P1-US_SeqListing

<220>

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Ile Ser Phe Asp Gly Thr Thr Lys

1

5

<210> 7

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<212> DNA

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33

<210> 8

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<212> PRT

<213> Artificial Sequence

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<223> Synthetic

<400> 8

Val Gly Ala Ile Ala Ala Ala Ala Phe Asp Leu

1

5

10

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<211> 324

<212> DNA

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ggccaggctc ccaggctcct catctatagt gcatccgcca gggccactgg tatcccagcc 180
aggttcactg gcagtgggtc tgggacagac ttcactctca ccatcagcag cctgcagtct 240
gaagattttg cagtttatta ctgtcagcag tataataact ggcccatgta cacttttggc 300
caggggacca agctggagat caaa 324

<210> 10

<211> 108

<212> PRT

<213> Artificial Sequence

COPY_10314P1-US_SeqListing

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Glu	Ile	Val	Met	Thr	Gln	Ser	Pro	Ala	Thr	Leu	Ser	Val	Ser	Pro	Gly
1				5					10					15	
Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Gln	Ser	Val	Ser	Ser	Asp
		20						25					30		
Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu	Ile
		35				40						45			
Tyr	Ser	Ala	Ser	Ala	Arg	Ala	Thr	Gly	Ile	Pro	Ala	Arg	Phe	Thr	Gly
	50					55					60				
Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Ser
65					70					75				80	
Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Tyr	Asn	Asn	Trp	Pro	Met
				85					90					95	
Tyr	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Leu	Glu	Ile	Lys				
			100					105							

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<212> DNA

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<210> 12

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 12

Gln	Ser	Val	Ser	Ser	Asp
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<210> 13

<211> 9

<212> DNA

<213> Artificial Sequence

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<223> Synthetic

COPY_10314P1-US_SeqListing

<400> 13
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9

<210> 14
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<400> 14
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<210> 15
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<400> 15
cagcagtata ataactggcc catgtacact

30

<210> 16
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<400> 16
Gln Gln Tyr Asn Asn Trp Pro Met Tyr Thr
1 5 10

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tcctgtgtag gttctggatt cagcttcgat gatcatggca tgaactgggt ccgccaaggt 120

COPY_10314P1-US_SeqListing

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ccaggaagg gactggagt ggtctctggt ttttaattgga atggtggtag tacaaattat 180
gcagaatctg tgaagggccg attcaccatc tccagagaca acgccaggaa ctccctgttt 240
ctgcaaataga acagtctgag agccgaggac acggccttat attactgtgt gagaggtcgc 300
agtggctggt tcaatgatgc ttttgatgtc tggggccag gaacaatggt caccgtctct 360
tca 363
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<210> 18
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 <223> Synthetic

<400> 18
 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Arg Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Val Gly Ser Gly Phe Ser Phe Asp Asp His
 20 25 30
 Gly Met Asn Trp Val Arg Gln Gly Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45
 Ser Gly Phe Asn Trp Asn Gly Gly Ser Thr Asn Tyr Ala Glu Ser Val
 50 55 60
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Ser Leu Phe
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
 85 90 95
 Val Arg Gly Arg Ser Gly Trp Phe Asn Asp Ala Phe Asp Val Trp Gly
 100 105 110
 Pro Gly Thr Met Val Thr Val Ser Ser
 115 120

<210> 19
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 <212> DNA
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<400> 19
 ggattcagct tcgatgatca tggc 24

<210> 20
 <211> 8
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<220>
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COPY_10314P1-US_SeqListing

<400> 20

Gly Phe Ser Phe Asp Asp His Gly
1 5

<210> 21

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 21

tttaattgga atggtgtag taca

24

<210> 22

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 22

Phe Asn Trp Asn Gly Gly Ser Thr
1 5

<210> 23

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 23

gtgagaggtc gcagtggctg gttcaatgat gcttttgatg tc

42

<210> 24

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 24

Val Arg Gly Arg Ser Gly Trp Phe Asn Asp Ala Phe Asp Val
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COPY_10314P1-US_SeqListing

<210> 25
 <211> 321
 <212> DNA
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<400> 25
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 ctctcctgca gggccagtca gactattaac agcaactact tagcctggta cgcacagaaa 120
 cctggccaga ctcccaggct cctcatctat ggtacatcca gtagggccac tggcatccca 180
 gacaggttca gtggcagtgg gtctgggaca gacttctctc tcaccatcag cagactggag 240
 cctgaagatt ttgcagtgtt ttactgtcag cagtatgctg gtttaccac tttcggccct 300
 gggaccaaag tggatatcaa a 321

<210> 26
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 26
 Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
 1 5 10 15
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Thr Ile Asn Ser Asn
 20 25 30
 Tyr Leu Ala Trp Tyr Arg Gln Lys Pro Gly Gln Thr Pro Arg Leu Leu
 35 40 45
 Ile Tyr Gly Thr Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
 50 55 60
 Gly Ser Gly Ser Gly Thr Asp Phe Ser Leu Thr Ile Ser Arg Leu Glu
 65 70 75 80
 Pro Glu Asp Phe Ala Val Phe Tyr Cys Gln Gln Tyr Ala Gly Leu Pro
 85 90 95
 Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
 100 105

<210> 27
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 <213> Artificial Sequence

<220>
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<400> 27
 cagactatta acagcaacta c

<210> 28
 <211> 7
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 <400> 28
 Gln Thr Ile Asn Ser Asn Tyr
 1 5

<210> 29
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<400> 29
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9

<210> 30
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<400> 30
 Gly Thr Ser
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<210> 31
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<400> 31
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24

<210> 32
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<400> 32

Gln Gln Tyr Ala Gly Leu Pro Thr
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<210> 33

<211> 348

<212> DNA

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<223> Synthetic

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 ccagggaagg gactggactg ggtgggcaac ataaagcaag atggaagtga acaaaactat 180
 gtggactctg tgaggggccg attcaccatc tccagagaca atgccaagaa ctcgctgttt 240
 ctgcaaatga acagtctgcg agccgaggac acgggtgtgt attactgtgc gactcttctg 300
 actaagggtg actactgggg ccagggaacc ctggtcaccg tctcctca 348

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<211> 116

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 34

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Ala Gln Pro Gly Gly
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Thr Phe Ser Thr Tyr
 20 25 30
 Trp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Asp Trp Val
 35 40 45
 Gly Asn Ile Lys Gln Asp Gly Ser Glu Gln Asn Tyr Val Asp Ser Val
 50 55 60
 Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Phe
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Gly Val Tyr Tyr Cys
 85 90 95
 Ala Thr Leu Leu Thr Lys Gly Asp Tyr Trp Gly Gln Gly Thr Leu Val
 100 105 110
 Thr Val Ser Ser
 115

<210> 35
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 <212> DNA
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<400> 35
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24

<210> 36
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<220>
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<400> 36
 Gly Phe Thr Phe Ser Thr Tyr Trp
 1 5

<210> 37
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 37
 ataaagcaag atggaagtga acaa

24

<210> 38
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 38
 Ile Lys Gln Asp Gly Ser Glu Gln
 1 5

<210> 39
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 <212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 39

gcgactcttc tgactaaggg tgactac

27

<210> 40

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 40

Ala Thr Leu Leu Thr Lys Gly Asp Tyr

1

5

<210> 41

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 41

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 gggaaagccc ctaagtccct gatctatgct gcatccattt tgcaaggtgg ggtcccatca 180
 aggttcagcg gcagtggata tgggacagat ttcactctca ccatcagcag cctgcagcct 240
 gaagattttg caacttatta ctgccgacag tataagactt acccattcac tttcggccct 300
 gggaccaaag tggatatcaa a 321

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<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 42

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly

1

5

10

15

Asp Ser Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Ser Asn Tyr

20

25

30

Leu Asp Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro Lys Ser Leu Ile

35

40

45

COPY_10314P1-US_SeqListing

Tyr	Ala	Ala	Ser	Ile	Leu	Gln	Gly	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
50						55					60				
Ser	Gly	Tyr	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
65					70					75					80
Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Arg	Gln	Tyr	Lys	Thr	Tyr	Pro	Phe
				85					90					95	
Thr	Phe	Gly	Pro	Gly	Thr	Lys	Val	Asp	Ile	Lys					
			100					105							

<210> 43
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<400> 43
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<210> 44
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<400> 44
 Gln Asp Ile Ser Asn Tyr
 1 5

<210> 45
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<220>
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<400> 45
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<210> 46
 <211> 3
 <212> PRT
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<220>
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COPY_10314P1-US_SeqListing

<400> 46

Ala Ala Ser

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<210> 47

<211> 27

<212> DNA

<213> Artificial Sequence

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<400> 47

cgacagtata agacttaccc attcact

27

<210> 48

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Synthetic

<400> 48

Arg Gln Tyr Lys Thr Tyr Pro Phe Thr

1

5

<210> 49

<211> 354

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 49

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ccaggaagg gactggagtg ggtctcatat attagtagta gtggtggtac caaatactac 180
gtagactctg tgaagggccg attcaccatt tccagagaca acgccaagaa gtcactgtat 240
ctgcaaatga acagcctgag agccgatgac acggctcttt attactgtgc gagactcaat 300
ggggttgatg tttttgatat ctggggccaa gggacaatgg tcaccgtctc ttca 354

<210> 50

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

COPY_10314P1-US_SeqListing

<223> Synthetic

<400> 50

Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Asp	Leu	Val	Gln	Pro	Gly	Glu
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Ser	Leu	Arg	Leu	Ser	Cys	Thr	Ala	Ser	Gly	Phe	Thr	Phe	Asn	Ser	Tyr
		20						25					30		
Glu	Met	Asn	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
	35						40					45			
Ser	Tyr	Ile	Ser	Ser	Ser	Gly	Gly	Thr	Lys	Tyr	Tyr	Val	Asp	Ser	Val
	50					55					60				
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Lys	Ser	Leu	Tyr
65					70				75						80
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Asp	Asp	Thr	Ala	Leu	Tyr	Tyr	Cys
			85					90						95	
Ala	Arg	Leu	Asn	Gly	Val	Asp	Val	Phe	Asp	Ile	Trp	Gly	Gln	Gly	Thr
			100					105					110		
Met	Val	Thr	Val	Ser	Ser										
			115												

<210> 51

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 51

ggattcacct tcaatagtta tgaa

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<210> 52

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 52

Gly	Phe	Thr	Phe	Asn	Ser	Tyr	Glu
1				5			

<210> 53

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 53
 attagtagta gtggtggtac caaa 24

 <210> 54
 <211> 8
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Synthetic

 <400> 54
 Ile Ser Ser Ser Gly Gly Thr Lys
 1 5

 <210> 55
 <211> 33
 <212> DNA
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 <400> 55
 gcgagactca atgggggtga tgtttttgat atc 33

 <210> 56
 <211> 11
 <212> PRT
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 <220>
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 <400> 56
 Ala Arg Leu Asn Gly Val Asp Val Phe Asp Ile
 1 5 10

 <210> 57
 <211> 321
 <212> DNA
 <213> Artificial Sequence

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 <400> 57
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 atcacttgcc gggcgagtca ggacattttc aattatttag cctggtttca gcagaaacca 120

COPY_10314P1-US_SeqListing

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gggaaagttc ctgagctcct gatctctgct gcgtccactt tgcaatcagg ggtcccatct 180
cgtttcagtg gcagtggatc tgggacatat ttcactctca ccatcagcag cctgcagcct 240
gaagatattg ctacttatta ctgtcaaaga tataacagtg ccccgctcac tttcggcgga 300
gggaccaagg tggagatcaa a 321

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 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Phe Asn Tyr
 20 25 30
 Leu Ala Trp Phe Gln Gln Lys Pro Gly Lys Val Pro Glu Leu Leu Ile
 35 40 45
 Ser Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Tyr Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Ser Ala Pro Leu
 85 90 95
 Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 59
 <211> 18
 <212> DNA
 <213> Artificial Sequence

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<400> 59
 caggacattt tcaattat 18

<210> 60
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<220>
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<400> 60
 Gln Asp Ile Phe Asn Tyr
 1 5

<210> 61
 <211> 9
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 <213> Artificial Sequence

<220>
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<400> 61
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9

<210> 62
 <211> 3
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<220>
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<400> 62
 Ala Ala Ser
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<210> 63
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 <212> DNA
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<220>
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<400> 63
 caaagatata acagtgtccc gtcact

27

<210> 64
 <211> 9
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<220>
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<400> 64
 Gln Arg Tyr Asn Ser Ala Pro Leu Thr
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<210> 65
 <211> 360

COPY_10314P1-US_SeqListing

<212> DNA

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<220>

<223> Synthetic

<400> 65

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ccagggaagg gcctggagtg ggtctcaggt attatttggga atagtgggtca cataggctat 180
ggggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa atccctatat 240
ctgcaaataa acagtctgag agctgaggac acggccttgt attattgtgc aagagatagt 300
gggaggtacc agtcctactt tgactactgg ggccaggga ccttggtcac cgtctcctca 360

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<210> 66

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 66

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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1           5           10           15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20           25           30
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35           40           45
Ser Gly Ile Ile Trp Asn Ser Gly His Ile Gly Tyr Gly Asp Ser Val
 50           55           60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Lys Ser Leu Tyr
 65           70           75           80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr Tyr Cys
 85           90           95
Ala Arg Asp Ser Gly Arg Tyr Gln Ser Tyr Phe Asp Tyr Trp Gly Gln
100          105          110
Gly Thr Leu Val Thr Val Ser Ser
115          120

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<210> 67

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<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 67

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ggattcacct ttgatgatta tgcc

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24

<210> 68

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<400> 68

Gly Phe Thr Phe Asp Asp Tyr Ala

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<210> 69

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 69

attatttggga atagtgggtca cata

24

<210> 70

<211> 8

<212> PRT

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<223> Synthetic

<400> 70

Ile Ile Trp Asn Ser Gly His Ile

1

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<210> 71

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 71

gcaagagata gtgggaggta ccagtcctac tttgactac

39

<210> 72

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 72

Ala	Arg	Asp	Ser	Gly	Arg	Tyr	Gln	Ser	Tyr	Phe	Asp	Tyr
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<210> 73

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 73

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atcacttgcc	gggccagtc	cattattagt	agctggttgg	cctggtatca	gcagaaacca	120
gggaaagccc	ctaaggtcct	gatctttaag	gcgtctagtt	tagaaagtgg	gggtcccatca	180
aggttcagcg	gcagtggatc	tgggacagaa	ttcactctca	ccatcagcag	cctgcagcct	240
gatgattttg	caacttatta	ctgccaacag	tataataactt	attctcggac	gttcggccaa	300
gggaccaagg	tggaatcaa	a				321

<210> 74

<211> 107

<212> PRT

<213> Artificial Sequence

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<223> Synthetic

<400> 74

Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Thr	Leu	Ser	Ala	Ser	Val	Gly
1				5					10					15	
Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	His	Ile	Ile	Ser	Ser	Trp
		20					25						30		
Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Val	Leu	Ile
		35				40						45			
Phe	Lys	Ala	Ser	Ser	Leu	Glu	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50					55				60					
Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
65					70					75				80	
Asp	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Tyr	Asn	Thr	Tyr	Ser	Arg
				85				90						95	
Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys					
		100						105							

<210> 75

<211> 18
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<400> 75
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18

<210> 76
<211> 6
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<400> 76
His Ile Ile Ser Ser Trp
1 5

<210> 77
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
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<400> 77
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9

<210> 78
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<213> Artificial Sequence

<220>
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<400> 78
Lys Ala Ser
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<210> 79
<211> 27
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<220>

<223> Synthetic

<400> 79

caacagtata atacttattc tcggacg

27

<210> 80

<211> 9

<212> PRT

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<400> 80

Gln Gln Tyr Asn Thr Tyr Ser Arg Thr

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<210> 81

<211> 372

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 81

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acctgtgcca tctccgggga cagtgtctct agtaatactt ttgcttgga ctggatcagg 120
cagtcccat cgagaggcct tgagtggctg ggaaggacat actacaggtc caagtggat 180
attgattatg cagaatctgt gaaaagtcga ataaccatca cccagacac atccaagaac 240
cagttctccc tgcagttgaa ctctgtgact cccgaggaca cggctctgta ttactgtgca 300
gggtggatata cctatgcccc ccgggggtgct tttgatattc ggggccaagg gacaatggtc 360
accgtctctt ca 372

<210> 82

<211> 124

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 82

Gln Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
1 5 10 15
Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn
20 25 30
Thr Phe Ala Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu
35 40 45
Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr Ile Asp Tyr Ala

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50	55	60													
Glu	Ser	Val	Lys	Ser	Arg	Ile	Thr	Ile	Thr	Pro	Asp	Thr	Ser	Lys	Asn
65					70					75					80
Gln	Phe	Ser	Leu	Gln	Leu	Asn	Ser	Val	Thr	Pro	Glu	Asp	Thr	Ala	Leu
				85					90					95	
Tyr	Tyr	Cys	Ala	Gly	Gly	Tyr	Thr	Tyr	Ala	Pro	Arg	Gly	Ala	Phe	Asp
			100					105					110		
Ile	Trp	Gly	Gln	Gly	Thr	Met	Val	Thr	Val	Ser	Ser				
		115					120								

<210> 83
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
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<400> 83
 ggggacagtg tctctagtaa tacttttgct 30

<210> 84
 <211> 10
 <212> PRT
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<220>
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<400> 84
 Gly Asp Ser Val Ser Ser Asn Thr Phe Ala
 1 5 10

<210> 85
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 <213> Artificial Sequence

<220>
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<400> 85
 acatactaca ggtccaagtg gtatatt 27

<210> 86
 <211> 9
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<220>

<223> Synthetic

<400> 86

Thr Tyr Tyr Arg Ser Lys Trp Tyr Ile
1 5

<210> 87

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 87

gcaggtggat acacctatgc cccccggggt gcttttgata tc 42

<210> 88

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 88

Ala Gly Gly Tyr Thr Tyr Ala Pro Arg Gly Ala Phe Asp Ile
1 5 10

<210> 89

<211> 318

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 89

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atcacttgcc gggccagtc gagtattagt agctggttgg cctggtatca gcagaaacca 120
gggaaagccc ctaaactcct gatctataag gcgtctagtt tagaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca ccatcagcag cctgcagcct 240
gatgattttg caacttatta ctgccaacag tatgttagtt atttcacttt tggccagggg 300
accaagctgg agatcaaa 318

<210> 90

<211> 106

<212> PRT

<213> Artificial Sequence

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<220>

<223> Synthetic

<400> 90

Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Thr	Leu	Ser	Ala	Ser	Val	Gly
1				5				10					15		
Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Ser	Ile	Ser	Ser	Trp
		20					25					30			
Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
		35				40						45			
Tyr	Lys	Ala	Ser	Ser	Leu	Glu	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50					55				60					
Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
65				70				75						80	
Asp	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Tyr	Val	Ser	Tyr	Phe	Thr
				85				90						95	
Phe	Gly	Gln	Gly	Thr	Lys	Leu	Glu	Ile	Lys						
			100					105							

<210> 91

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 91

cagagtatta gtagctgg

18

<210> 92

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 92

Gln	Ser	Ile	Ser	Ser	Trp
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<210> 93

<211> 9

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 93
aaggcgtct

9

<210> 94
<211> 3
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<220>
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<400> 94
Lys Ala Ser
1

<210> 95
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
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<400> 95
caacagtatg ttagttattt cact

24

<210> 96
<211> 8
<212> PRT
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<220>
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<400> 96
Gln Gln Tyr Val Ser Tyr Phe Thr
1 5

<210> 97
<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 97
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tcctgtgcag cctctggatt caccttcagt agttatgaaa tgaactgggt ccgccaggct 120
ccagggaagg ggctggagtg gatttcatac attagtagtc gtggtggtac catatactac 180

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gcagactcta taaagggccg attcaccatc tacagagaca acgccaggaa ctactgtat 240
 ctgcaaatga acagcctgag agccgaggac acggctatattt attactgtgc gagactgagt 300
 ggggttgata tttttgatat ctggggccaa gggacaatgg tcaccgtctc ttca 354

<210> 98

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 98

Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly				
1				5				10					15						
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Ser	Tyr				
			20					25					30						
Glu	Met	Asn	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile				
		35				40						45							
Ser	Tyr	Ile	Ser	Ser	Arg	Gly	Gly	Thr	Ile	Tyr	Tyr	Ala	Asp	Ser	Ile				
	50					55					60								
Lys	Gly	Arg	Phe	Thr	Ile	Tyr	Arg	Asp	Asn	Ala	Arg	Asn	Ser	Leu	Tyr				
65					70				75					80					
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Ile	Tyr	Tyr	Cys				
			85					90					95						
Ala	Arg	Leu	Ser	Gly	Val	Asp	Ile	Phe	Asp	Ile	Trp	Gly	Gln	Gly	Thr				
			100					105					110						
Met	Val	Thr	Val	Ser	Ser														
			115																

<210> 99

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 99

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<210> 100

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 100

Gly Phe Thr Phe Ser Ser Tyr Glu

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<210> 101
<211> 24
<212> DNA
<213> Artificial Sequence

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<400> 101
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24

<210> 102
<211> 8
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<220>
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<400> 102
Ile Ser Ser Arg Gly Gly Thr Ile
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<210> 103
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
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<400> 103
gcgagactga gtggggttga tatttttgat atc

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<210> 104
<211> 11
<212> PRT
<213> Artificial Sequence

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<223> Synthetic

<400> 104
Ala Arg Leu Ser Gly Val Asp Ile Phe Asp Ile
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<210> 105

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<211> 321
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 <213> Artificial Sequence

<220>
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<400> 105
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 gggaaagttc ctaaactcct gatctatctt gcatccactt tgcaatcagg ggtcccttct 180
 cgcttcagtg gcggtggatc tgggacagat ttcactctca ccatcagcag cctgcagcct 240
 gaagatgttg caacttatta ctgtcaaagg tataacagtg ccccgctcac tttcggcgga 300
 gggaccaagg tggagatcaa a 321

<210> 106
 <211> 107
 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 106
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 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
 35 40 45
 Tyr Phe Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Gly Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Val Ala Thr Tyr Tyr Cys Gln Arg Tyr Asn Ser Ala Pro Leu
 85 90 95
 Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 107
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
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<400> 107
 cagggcatta gcaattat

18

<210> 108

<211> 6
<212> PRT
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<220>
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<400> 108
Gln Gly Ile Ser Asn Tyr
1 5

<210> 109
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
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<400> 109
tttgcattcc

9

<210> 110
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 110
Phe Ala Ser
1

<210> 111
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
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<400> 111
caaaggtata acagtgtccc gctcact

27

<210> 112
<211> 9
<212> PRT
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<220>

<223> Synthetic

<400> 112

Gln Arg Tyr Asn Ser Ala Pro Leu Thr

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<210> 113

<211> 363

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<220>

<223> Synthetic

<400> 113

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tcctgtgcag cctctggatt cacctttagc agctatgccg tgacctgggt ccgccaggct 120
ccagggaagg ggctggagtg ggtctcagct attactggta gtgttggtta cacatactac 180
gcagactctg tgaagggtcg gttcaccatc tccagagaca attccaagaa cacgctgtat 240
ctgcaaatga acagcctggg agccgaggat acggccgaat attactgtgc gaaaggggcg 300
ggaatgacta cgaactggta cctcgatctc tggggccgtg gcaccctggt caccgtctcc 360
tca
363

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<210> 114

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 114

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Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20          25          30
Ala Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35          40          45
Ser Ala Ile Thr Gly Ser Val Gly Asn Thr Tyr Tyr Ala Asp Ser Val
50          55          60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65          70          75          80
Leu Gln Met Asn Ser Leu Gly Ala Glu Asp Thr Ala Glu Tyr Tyr Cys
85          90          95
Ala Lys Gly Ala Gly Met Thr Thr Asn Trp Tyr Leu Asp Leu Trp Gly
100         105         110
Arg Gly Thr Leu Val Thr Val Ser Ser
115         120

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<210> 115
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 115
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24

<210> 116
<211> 8
<212> PRT
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<220>
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<400> 116
Gly Phe Thr Phe Ser Ser Tyr Ala
1 5

<210> 117
<211> 24
<212> DNA
<213> Artificial Sequence

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<223> Synthetic

<400> 117
attactggta gtgttggttaa caca

24

<210> 118
<211> 8
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<220>
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<400> 118
Ile Thr Gly Ser Val Gly Asn Thr
1 5

<210> 119
<211> 42
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<223> Synthetic

<400> 119

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42

<210> 120

<211> 14

<212> PRT

<213> Artificial Sequence

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<223> Synthetic

<400> 120

Ala Lys Gly Ala Gly Met Thr Thr Asn Trp Tyr Leu Asp Leu

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10

<210> 121

<211> 339

<212> DNA

<213> Artificial Sequence

<220>

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<400> 121

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tggtaccagc agaaaccagg acagcctcct aaacttctca ttaagtgggc atctaccgg 180
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtggca gtttattatt gtcagcaata tgctagtagt 300
ccgtatactt ttggccaggg gaccaagctg gagatcaaa 339

<210> 122

<211> 113

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 122

Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
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Ala Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser
20 25 30
Ser Asn Asn Gln Asn Tyr Leu Thr Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45
Pro Pro Lys Leu Leu Ile Lys Trp Ala Ser Thr Arg Glu Ser Gly Val

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50 55 60
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 65 70 75 80
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln
 85 90 95
 Tyr Ala Ser Ser Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
 100 105 110
 Lys

<210> 123
 <211> 36
 <212> DNA
 <213> Artificial Sequence

<220>
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<400> 123
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<210> 124
 <211> 12
 <212> PRT
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<220>
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<400> 124
 Gln Ser Val Leu Tyr Ser Ser Asn Asn Gln Asn Tyr
 1 5 10

<210> 125
 <211> 9
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 125
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<210> 126
 <211> 3
 <212> PRT
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<223> Synthetic

<400> 126

Trp Ala Ser

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<210> 127

<211> 27

<212> DNA

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<223> Synthetic

<400> 127

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27

<210> 128

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 128

Gln Gln Tyr Ala Ser Ser Pro Tyr Thr

1

5

<210> 129

<211> 351

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 129

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 ccagggaagg gcctggagtg ggtctcaggt attagttgga atagtgttta catagactat 180
 gcggactctg tgaagggccg attcaccatt ttcagagaca acgccaagaa ctccctgtat 240
 ctgcaaatga acagtctgag agctgaggac acggccttct attactgtgc aagagatatt 300
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<210> 130

<211> 117

<212> PRT

<213> Artificial Sequence

COPY_10314P1-US_SeqListing

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<400> 130

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Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Leu	Asp	Asp	His
			20					25					30		
Ala	Val	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
		35					40					45			
Ser	Gly	Ile	Ser	Trp	Asn	Ser	Val	Tyr	Ile	Asp	Tyr	Ala	Asp	Ser	Val
	50					55				60					
Lys	Gly	Arg	Phe	Thr	Ile	Phe	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Tyr
65					70					75					80
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Phe	Tyr	Tyr	Cys
				85					90					95	
Ala	Arg	Asp	Ile	Glu	Gly	Ala	Arg	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu
			100					105					110		
Val	Thr	Val	Ser	Ser											
			115												

<210> 131

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 131

ggattcaccc ttgatgatca tgcc

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<210> 132

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 132

Gly	Phe	Thr	Leu	Asp	Asp	His	Ala
1				5			

<210> 133

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 133

attagttgga atagtgttta cata

24

<210> 134

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 134

Ile Ser Trp Asn Ser Val Tyr Ile

1

5

<210> 135

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 135

gcaagagata ttgaggagc tcgggactac

30

<210> 136

<211> 10

<212> PRT

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<223> Synthetic

<400> 136

Ala Arg Asp Ile Glu Gly Ala Arg Asp Tyr

1

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10

<210> 137

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 137

gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60

COPY_10314P1-US_SeqListing

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atcacttgcc gggctagtca gggcattaga aatgatttag gctggtatca gcaaaaacca 120
gggaaagccc ctaagcgcct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggata tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caccttatta ctgtctacag cataatagtt acccgctcac tttcggcgga 300
gggaccaagg tggagatcaa a 321

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 <211> 107
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 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp
 20 25 30
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile
 35 40 45
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Tyr Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Glu Asp Phe Ala Pro Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Leu
 85 90 95
 Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 139
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 <212> DNA
 <213> Artificial Sequence

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<400> 139
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<210> 140
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<400> 140
 Gln Gly Ile Arg Asn Asp

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<210> 141
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<213> Artificial Sequence

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<223> Synthetic

<400> 141
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9

<210> 142
<211> 3
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<213> Artificial Sequence

<220>
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<400> 142
Ala Ala Ser
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<210> 143
<211> 27
<212> DNA
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<220>
<223> Synthetic

<400> 143
ctacagcata atagttaccc gtcact

27

<210> 144
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 144
Leu Gln His Asn Ser Tyr Pro Leu Thr
1 5

<210> 145

COPY_10314P1-US_SeqListing

<211> 357
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

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ccagggaagg ggctggagtg ggtctcagct attaattggct gtggtgatgg cacacactac 180
gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagac cacgctgtat 240
ctgcaaata gaagcctgag agccgaggac acggccgtat attactgtgc gaaacccgtc 300
atgagtacaa atggttttga tatctggggc caagggacaa tggtcaccgt ctcttca 357

<210> 146
<211> 119
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 146
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ile Tyr
20 25 30
Ala Met Ser Trp Phe Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Ala Ile Asn Gly Arg Gly Asp Gly Thr His Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Thr Thr Leu Tyr
65 70 75 80
Leu Gln Met Ser Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Lys Pro Val Met Ser Thr Asn Gly Phe Asp Ile Trp Gly Gln Gly
100 105 110
Thr Met Val Thr Val Ser Ser
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<210> 147
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
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<400> 147
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<210> 148
 <211> 8
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<220>
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<400> 148
 Gly Phe Ser Phe Ser Ile Tyr Ala
 1 5

<210> 149
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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 149
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24

<210> 150
 <211> 8
 <212> PRT
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<220>
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<400> 150
 Ile Asn Gly Arg Gly Asp Gly Thr
 1 5

<210> 151
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 <212> DNA
 <213> Artificial Sequence

<220>
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<400> 151
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36

<210> 152
 <211> 12
 <212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 152

Ala Lys Pro Val Met Ser Thr Asn Gly Phe Asp Ile
 1 5 10

<210> 153

<211> 318

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 153

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 gggaaagccc ctaagctcct aatctataag gcgtctaatt tagaaagtgg ggtcccatca 180
 aggttcagcg gcagtggatc tgggacagag ttcactctca ccatacagcag cctgcagcct 240
 gatgattttg caacttatta ctgccaacag tataatattt attggacgtt cggccaaggg 300
 accaaggtgg aaatcaaa 318

<210> 154

<211> 106

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 154

Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly
 1 5 10 15
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Trp
 20 25 30
 Leu Ala Trp Tyr Gln Leu Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
 35 40 45
 Tyr Lys Ala Ser Asn Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
 65 70 75 80
 Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Asn Ile Tyr Trp Thr
 85 90 95
 Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
 100 105

<210> 155

<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 155
cagagtatta gtagctgg

18

<210> 156
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 156
Gln Ser Ile Ser Ser Trp
1 5

<210> 157
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 157
aaggcgtct

9

<210> 158
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 158
Lys Ala Ser
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<210> 159
<211> 24
<212> DNA
<213> Artificial Sequence

COPY_10314P1-US_SeqListing

<220>

<223> Synthetic

<400> 159

caacagtata atatttattg gacg

24

<210> 160

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 160

Gln Gln Tyr Asn Ile Tyr Trp Thr

1

5

<210> 161

<211> 351

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 161

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tcctgcaagg cttctgggta cacctttggc acctctggta tcacctgggt gcgacaggcc 120
cctggacaag ggcttgagt gatgggatgg agcagcgctt acaatggtaa aacagactat 180
gcacaaaagt tccaggacag agtcaccatg accacagaca catccacgac cacaggctac 240
atggagatga ggagccttac atctgacgac acggccgtct attactgtac tactgtagta 300
cgctgtccct ttgacttctg gggccaggga accctgggtca ccgtctcctc a 351

<210> 162

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 162

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Gly Thr Ser
20 25 30
Gly Ile Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
35 40 45
Gly Trp Ser Ser Ala Tyr Asn Gly Lys Thr Asp Tyr Ala Gln Lys Phe
50 55 60

COPY_10314P1-US_SeqListing

Gln	Asp	Arg	Val	Thr	Met	Thr	Thr	Asp	Thr	Ser	Thr	Thr	Thr	Gly	Tyr
65					70					75					80
Met	Glu	Met	Arg	Ser	Leu	Thr	Ser	Asp	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
				85					90					95	
Thr	Thr	Val	Val	Arg	Arg	Pro	Phe	Asp	Phe	Trp	Gly	Gln	Gly	Thr	Leu
			100					105					110		
Val	Thr	Val	Ser	Ser											
			115												

<210> 163
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 163
 ggttacacct ttggcacctc tggt 24

<210> 164
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 164
 Gly Tyr Thr Phe Gly Thr Ser Gly
 1 5

<210> 165
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 165
 agcagcgctt acaatggtaa aaca 24

<210> 166
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

COPY_10314P1-US_SeqListing

<400> 166

Ser Ser Ala Tyr Asn Gly Lys Thr
1 5

<210> 167

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 167

actactgtag tacgtcgtcc ctttgacttc 30

<210> 168

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 168

Thr Thr Val Val Arg Arg Pro Phe Asp Phe
1 5 10

<210> 169

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 169

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gggaaagccc ctaagtcct gatctatgct gcatccagtt tacaaagtgg ggtcccatca 180
aagttcagcg gcggtggatc tgggacagat ttcgctctca ccatcagcag cctgcagcct 240
gaggattttg caacttatta ctgccaacag tatagttctt accctatcac cttcggccaa 300
gggacacgac tggagattaa a 321

<210> 170

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

COPY_10314P1-US_SeqListing

<223> Synthetic

<400> 170

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Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Asp	Ile	Asn	Asn	Phe
		20					25					30			
Leu	Ala	Trp	Phe	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Ser	Leu	Ile
	35					40					45				
Tyr	Ala	Ala	Ser	Ser	Leu	Gln	Ser	Gly	Val	Pro	Ser	Lys	Phe	Ser	Gly
	50				55				60						
Gly	Gly	Ser	Gly	Thr	Asp	Phe	Ala	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
65				70					75					80	
Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Tyr	Ser	Ser	Tyr	Pro	Ile
				85				90						95	
Thr	Phe	Gly	Gln	Gly	Thr	Arg	Leu	Glu	Ile	Lys					
			100					105							

<210> 171

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 171

caggacatta ataatttt

18

<210> 172

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 172

Gln	Asp	Ile	Asn	Asn	Phe
1			5		

<210> 173

<211> 9

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 173

gctgcatcc

<210> 174

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 174

Ala Ala Ser

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<210> 175

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 175

caacagtata gttcttacc tacc

27

<210> 176

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 176

Gln Gln Tyr Ser Ser Tyr Pro Ile Thr

1

5

<210> 177

<211> 351

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 177

gaggtgcagc tgggtggagtc tggggggaggc ttggtccagc cggggggggtc cctcagactc 60
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 ccaggaaagg ggctggagtg ggtggccaat attaaagaag atggaagtga ttcatactat 180
 gtggactctg tggagggccg attcaccatc tccagagaca acgccaagag ttcactttat 240

COPY_10314P1-US_SeqListing

ctgcaaatga acagtctgag agtcgacgac acggctgtat atttctgtgc gagagcgagg 300
acagtccctc tccactactg gggccagggc accctggtca ccgtctcctc a 351

<210> 178
<211> 117
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 178
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
Ser Leu Arg Leu Ser Cys Ile Val Ser Gly Phe Thr Phe Ser Gly Ser
20 25 30
Trp Met Ser Trp Val Arg Gln Leu Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ala Asn Ile Lys Glu Asp Gly Ser Asp Ser Tyr Tyr Val Asp Ser Val
50 55 60
Glu Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser Ser Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Val Asp Asp Thr Ala Val Tyr Phe Cys
85 90 95
Ala Arg Ala Arg Thr Val Pro Leu His Tyr Trp Gly Gln Gly Thr Leu
100 105 110
Val Thr Val Ser Ser
115

<210> 179
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 179
ggattcacct ttagtggctc ttgg 24

<210> 180
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 180
Gly Phe Thr Phe Ser Gly Ser Trp
1 5

<210> 181
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 181
attaaagaag atggaagtga ttca

24

<210> 182
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 182
Ile Lys Glu Asp Gly Ser Asp Ser
1 5

<210> 183
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 183
gcgagagcga ggacagtccc tctccactac

30

<210> 184
<211> 10
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<220>
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<400> 184
Ala Arg Ala Arg Thr Val Pro Leu His Tyr
1 5 10

<210> 185
<211> 321

COPY_10314P1-US_SeqListing

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 185

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atcacttgcc gggccagtca gagtattaat atttggttgg cctggtatca acagaaacca 120
gggaaagccc ctaaactcct gatctatagg gcgtcttatt tagaaagtgg ggtcccatca 180
agtttcgccg gcggtggatc tgggacagaa ttcactctca ccatcagcag cctgcagcct 240
gatgactttg gaacttatta ttgtcaacac tataatagtt atccattcac ttttggccag 300
gggaccaagc tggagatcaa a 321
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<210> 186

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 186

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Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly
 1          5          10          15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Asn Ile Trp
          20          25          30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
          35          40          45
Tyr Arg Ala Ser Tyr Leu Glu Ser Gly Val Pro Ser Ser Phe Ala Gly
          50          55          60
Gly Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65          70          75          80
Asp Asp Phe Gly Thr Tyr Tyr Cys Gln His Tyr Asn Ser Tyr Pro Phe
          85          90          95
Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
          100          105
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<210> 187

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 187

cagagtatta atatttgg

18

<210> 188

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 188

Gln Ser Ile Asn Ile Trp

1

5

<210> 189

<211> 9

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 189

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9

<210> 190

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

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<400> 190

Arg Ala Ser

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<210> 191

<211> 27

<212> DNA

<213> Artificial Sequence

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<223> Synthetic

<400> 191

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27

<210> 192

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

COPY_10314P1-US_SeqListing

<223> Synthetic

<400> 192

Gln His Tyr Asn Ser Tyr Pro Phe Thr
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<210> 193

<211> 357

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 193

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ccagggaagg gcctggagtg ggtctcaggc attagtgtgt atagtgtatc cttaggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgcaaaaaa ctccctgtat 240
ctgcaaatga acagtctgag aactgaggac acggccttct attactgtgc aaaaatctct 300
agcagcggct gggcctttga ctactggggc cagggaaccc tggtcaccgt ctcctca 357

<210> 194

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 194

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Gly Tyr
20 25 30
Ala Met His Trp Val Arg Gln Gly Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Gly Ile Ser Trp Tyr Ser Asp Thr Leu Gly Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Phe Tyr Tyr Cys
85 90 95
Ala Lys Ile Ser Ser Ser Gly Trp Ala Phe Asp Tyr Trp Gly Gln Gly
100 105 110
Thr Leu Val Thr Val Ser Ser
115

<210> 195

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 195

ggattcacct ttgatgggta tgcc

24

<210> 196

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 196

Gly Phe Thr Phe Asp Gly Tyr Ala

1

5

<210> 197

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 197

attagttggg atagtgatac ctta

24

<210> 198

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 198

Ile Ser Trp Tyr Ser Asp Thr Leu

1

5

<210> 199

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

COPY_10314P1-US_SeqListing

<223> Synthetic

<400> 199

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36

<210> 200

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 200

Ala Lys Ile Ser Ser Ser Gly Trp Ala Phe Asp Tyr

1

5

10

<210> 201

<211> 327

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 201

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cctggccaga ctcccaggct cctcatctat ggtacatcca gcagggccac tggcatccca 180
gacaggttca gtggcagtggt gtctgggaca gacttcactc tcaccatcag cagactggag 240
cctgaagatt ttgcagtgtta ttactgtcag cagtatggta gttcacctct attcactttc 300
ggccctggga ccaaagtgga tatcaaa 327

<210> 202

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 202

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser His Ser Val Ser Ser Ala
20 25 30
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Thr Pro Arg Leu Leu
35 40 45
Ile Tyr Gly Thr Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu

COPY_10314P1-US_SeqListing

65					70					75				80
Pro	Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Tyr	Gly	Ser	Pro
				85					90				95	
Leu	Phe	Thr	Phe	Gly	Pro	Gly	Thr	Lys	Val	Asp	Ile	Lys		
			100					105						

<210> 203
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 203
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<210> 204
 <211> 7
 <212> PRT
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<220>
 <223> Synthetic

<400> 204
 His Ser Val Ser Ser Ala Tyr
 1 5

<210> 205
 <211> 9
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 205
 ggtacatcc 9

<210> 206
 <211> 3
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 206
 Gly Thr Ser

1

<210> 207
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 207
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<210> 208
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 208
 Gln Gln Tyr Gly Ser Ser Pro Leu Phe Thr
 1 5 10

<210> 209
 <211> 363
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 209
 caggtacagc tgcagcagtc aggtccagga ctggtgaagc cctcgcagac cctctcactc 60
 acctgtgtca tctccgggga cagtgtctct agtaacactg cttggaactg ggtcaggcag 120
 tccccatcga gaggccttga gtggctggga aggacatact acaggtccaa gtggtataat 180
 gattatgcag tatctgtgaa aagtcgaata accatcaacc cagacacatc caagaaccag 240
 ttctccctgc tgatgaactc tgtgactccc gaagacacgg ctgtatatta ttgcgcaaga 300
 gtggttcggg gacttaacta ctttgactac tggggccagg gaaccctggt cactgtctcc 360
 tca 363

<210> 210
 <211> 121
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

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<400> 210

Gln	Val	Gln	Leu	Gln	Gln	Ser	Gly	Pro	Gly	Leu	Val	Lys	Pro	Ser	Gln
1				5					10					15	
Thr	Leu	Ser	Leu	Thr	Cys	Val	Ile	Ser	Gly	Asp	Ser	Val	Ser	Ser	Asn
			20					25					30		
Thr	Ala	Trp	Asn	Trp	Val	Arg	Gln	Ser	Pro	Ser	Arg	Gly	Leu	Glu	Trp
	35						40					45			
Leu	Gly	Arg	Thr	Tyr	Tyr	Arg	Ser	Lys	Trp	Tyr	Asn	Asp	Tyr	Ala	Val
50						55					60				
Ser	Val	Lys	Ser	Arg	Ile	Thr	Ile	Asn	Pro	Asp	Thr	Ser	Lys	Asn	Gln
65					70					75				80	
Phe	Ser	Leu	Leu	Met	Asn	Ser	Val	Thr	Pro	Glu	Asp	Thr	Ala	Val	Tyr
				85					90					95	
Tyr	Cys	Ala	Arg	Val	Val	Arg	Gly	Leu	Asn	Tyr	Phe	Asp	Tyr	Trp	Gly
			100					105					110		
Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser							
		115					120								

<210> 211

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 211

ggggacagtg tctctagtaa cactgct

27

<210> 212

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 212

Gly	Asp	Ser	Val	Ser	Ser	Asn	Thr	Ala
1				5				

<210> 213

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 213

acatactaca ggtccaagtg gtataat

27

<210> 214

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 214

Thr Tyr Tyr Arg Ser Lys Trp Tyr Asn

1

5

<210> 215

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 215

gcaagagtgg ttcggggact taactacttt gactac

36

<210> 216

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 216

Ala Arg Val Val Arg Gly Leu Asn Tyr Phe Asp Tyr

1

5

10

<210> 217

<211> 339

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 217

gacatcgtga tgaccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60
 atcaactgca agtccagcca gagtgtttta tacaactcca acaataagaa ctacttagct 120
 tggtaccagc agaaaccagg acagcctcct aaactactca tttactggtc atcttcccgg 180
 gaatccggggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240

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atcagcggcc tgcaggctga agatgtggca atttattact gtcagcaata ttctacaatt 300
ccttacactt ttggccaggg gaccaagctg gagatcaaa 339

<210> 218
<211> 113
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 218
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 5 10 15
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Asn
20 25 30
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45
Pro Pro Lys Leu Leu Ile Tyr Trp Ser Ser Ser Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Ser Gly Leu Gln Ala Glu Asp Val Ala Ile Tyr Tyr Cys Gln Gln
85 90 95
Tyr Ser Thr Ile Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
100 105 110
Lys

<210> 219
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 219
cagagtgttt tatacaactc caacaataag aactac 36

<210> 220
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 220
Gln Ser Val Leu Tyr Asn Ser Asn Asn Lys Asn Tyr
1 5 10

<210> 221
 <211> 9
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 221
 tggtcattct

9

<210> 222
 <211> 3
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 222
 Trp Ser Ser
 1

<210> 223
 <211> 27
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 223
 cagcaatatt ctacaattcc ttacact

27

<210> 224
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 224
 Gln Gln Tyr Ser Thr Ile Pro Tyr Thr
 1 5

<210> 225
 <211> 351

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<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 225

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gaggtgcagc tgggtggagtc tggggggaggt gtggtacggc cggggggggtc cctgagactc 60
tcctgtgcag cctctggatt caagtttgat gattatggca tgacctgggt ccgccacgtt 120
ccagggaagg ggctggagtg ggtctctggt attaattgga atggtggttag aacaggttat 180
acagactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaatga acagtctgag agccgaggac acggccttgt atcactgtgc gggagctcgc 300
cgtgatgctt ttgatatctg gggccaaggg acaatgggtca ccgtctcttc a 351
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<210> 226

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 226

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Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Arg Pro Gly Gly
1          5          10          15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Lys Phe Asp Asp Tyr
20          25          30
Gly Met Thr Trp Val Arg His Val Pro Gly Lys Gly Leu Glu Trp Val
35          40          45
Ser Gly Ile Asn Trp Asn Gly Gly Arg Thr Gly Tyr Thr Asp Ser Val
50          55          60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65          70          75          80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Leu Tyr His Cys
85          90          95
Ala Gly Ala Arg Arg Asp Ala Phe Asp Ile Trp Gly Gln Gly Thr Met
100          105          110
Val Thr Val Ser Ser
115
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<210> 227

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 227

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ggattcaagt ttgatgatta tggc
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24

<210> 228

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 228

Gly Phe Lys Phe Asp Asp Tyr Gly

1

5

<210> 229

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 229

attaattgga atggtggtag aaca

24

<210> 230

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 230

Ile Asn Trp Asn Gly Gly Arg Thr

1

5

<210> 231

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 231

gcgggagctc gccgtgatgc ttttgatc

30

<210> 232

<211> 10

<212> PRT

<213> Artificial Sequence

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<220>

<223> Synthetic

<400> 232

Ala Gly Ala Arg Arg Asp Ala Phe Asp Ile
1 5 10

<210> 233

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 233

gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctataggaga cagagtcacc 60
atcacttgcc gggcaagtca gaacattatc aaatatattaa attggtatca gcagaatgca 120
gggaaagccc ctaagctcct gatctatact gcatccagct tgcaaagtgg agtcccatca 180
cggttcagtg gcagcggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caacttacta ctgtcaacag agttccagtt ccccatcac ttttgccag 300
gggaccaagc tggagatcaa a 321

<210> 234

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 234

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Ile Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asn Ile Ile Lys Tyr
20 25 30
Leu Asn Trp Tyr Gln Gln Asn Ala Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45
Tyr Thr Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Ser Ser Ser Pro Tyr
85 90 95
Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 235

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 235

cagaacatta tcaaatat

18

<210> 236

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 236

Gln Asn Ile Ile Lys Tyr

1

5

<210> 237

<211> 9

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 237

actgcatcc

9

<210> 238

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 238

Thr Ala Ser

1

<210> 239

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 239

caacagagtt ccagttcccc atacact

27

<210> 240

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 240

Gln Gln Ser Ser Ser Ser Pro Tyr Thr

1

5

<210> 241

<211> 366

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 241

caggtcacct tgaaggagtc tggctcctgtg ctgggtgaaac ccacacagac cctctcgctg 60
acctgcaccg tctcgggggtt ctcactcagt gatgctggta tgggtgtgag ctggatccgt 120
cagccccag ggaaggccct ggagtggctt gcacacattt tttcgaatga cgggaaatcc 180
tacagcacat ctctgaagag cagactcacc atctccaagg acacctcaa aaggcaggtg 240
gtccttacca tgaccaacat ggaccctgtg gacacagcca catattactg tgcacggata 300
cggactggaa cttattcctt ataccttgac tactggggcc agggaaccct ggtcactgtc 360
tcctca 366

<210> 242

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 242

Gln Val Thr Leu Lys Glu Ser Gly Pro Val Leu Val Lys Pro Thr Gln
1 5 10 15
Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Ser Asp Ala
20 25 30
Gly Met Gly Val Ser Trp Ile Arg Gln Pro Pro Gly Lys Ala Leu Glu
35 40 45
Trp Leu Ala His Ile Phe Ser Asn Asp Gly Lys Ser Tyr Ser Thr Ser
50 55 60

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Leu	Lys	Ser	Arg	Leu	Thr	Ile	Ser	Lys	Asp	Thr	Ser	Lys	Arg	Gln	Val
65					70				75					80	
Val	Leu	Thr	Met	Thr	Asn	Met	Asp	Pro	Val	Asp	Thr	Ala	Thr	Tyr	Tyr
				85				90						95	
Cys	Ala	Arg	Ile	Arg	Thr	Gly	Thr	Tyr	Ser	Leu	Tyr	Leu	Asp	Tyr	Trp
			100				105						110		
Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser						
		115				120									

<210> 243
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 243
 gggttctcac tcagtgatgc tggatatgggt 30

<210> 244
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 244
 Gly Phe Ser Leu Ser Asp Ala Gly Met Gly
 1 5 10

<210> 245
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 245
 attttttcga atgacgggaa a 21

<210> 246
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

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<400> 246

Ile Phe Ser Asn Asp Gly Lys

1

5

<210> 247

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 247

gcacggatac ggactggaac ttattcctta taccttgact ac

42

<210> 248

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 248

Ala Arg Ile Arg Thr Gly Thr Tyr Ser Leu Tyr Leu Asp Tyr

1

5

10

<210> 249

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 249

gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttgcc gggcaagtca gagcattaac agctatttaa attggtatca gcagaaacca 120
gggaaagccc ctaagctcct gctctatattt gcatccagtt tgcaaagtgg ggtcccatca 180
aggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag tctgcaacct 240
gaagattttg caagtacta ctgtcaagag agttatagta ccccgtggac gttcggccaa 300
gggaccaagg tggaaatcaa a 321

<210> 250

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

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<223> Synthetic

<400> 250

Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
1				5				10					15		
Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Ser	Ile	Asn	Ser	Tyr
		20					25					30			
Leu	Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Leu
	35					40					45				
Tyr	Phe	Ala	Ser	Ser	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50				55				60						
Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
65				70				75						80	
Glu	Asp	Phe	Ala	Ser	Tyr	Tyr	Cys	Gln	Glu	Ser	Tyr	Ser	Thr	Pro	Trp
			85					90					95		
Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys					
			100					105							

<210> 251

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 251

cagagcatta acagctat

18

<210> 252

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 252

Gln	Ser	Ile	Asn	Ser	Tyr
1			5		

<210> 253

<211> 9

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 253

tttgcattcc

<210> 254

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 254

Phe Ala Ser

1

<210> 255

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 255

caagagagtt atagtacccc gtggacg

27

<210> 256

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 256

Gln Glu Ser Tyr Ser Thr Pro Trp Thr

1

5

<210> 257

<211> 363

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 257

cagggtgcagc tgggtggagtc tggggggaggc gtggtccagc ctgggaggtc cctgagactc 60
 tcctgtgcag cgtctggatt caccttcagt gactataaca tgcactgggt ccgccaggct 120
 ccaggcaagg ggctggagtg ggtggcgggt atatgggatg atggatctaa taaacactat 180
 gcagactccg tgaagggccg attcacaatc tccagagaca attccaagaa cacgctctat 240

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ctgcaaatga acagcctgag agccgaggac acggctgtgt attactgtgc gagagatgga 300
 ttacgattt ttggaatggt tcttgactac tggggccagg gaaccctggt caccgtctcc 360
 tca 363

<210> 258

<211> 121

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 258

Gln	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Val	Val	Gln	Pro	Gly	Arg
1				5				10					15		
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Asp	Tyr
			20					25					30		
Asn	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
		35					40					45			
Ala	Val	Ile	Trp	Tyr	Asp	Gly	Ser	Asn	Lys	His	Tyr	Ala	Asp	Ser	Val
	50					55					60				
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Tyr
65					70				75					80	
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
			85					90					95		
Ala	Arg	Asp	Gly	Phe	Thr	Ile	Phe	Gly	Met	Val	Leu	Asp	Tyr	Trp	Gly
			100					105					110		
Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser							
		115					120								

<210> 259

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 259

ggattcacct tcagtgacta taac

24

<210> 260

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 260

Gly Phe Thr Phe Ser Asp Tyr Asn

1

5

<210> 261
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 261
 atatggtatg atggatctaa taaa

24

<210> 262
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 262
 Ile Trp Tyr Asp Gly Ser Asn Lys
 1 5

<210> 263
 <211> 42
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 263
 gcgagagatg gatttacgat ttttggaatg gttcttgact ac

42

<210> 264
 <211> 14
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 264
 Ala Arg Asp Gly Phe Thr Ile Phe Gly Met Val Leu Asp Tyr
 1 5 10

<210> 265

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<211> 327
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 265
gaaattgtgt tgacgcagtc tccaggcacc ctgtctttgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagtgttatc agcagctact tagcctggta ccagcagaag 120
cctggtcagg ctcccaggct cctcatctat ggtgcatcca gcagggccac tggcatccca 180
gacagggtca gtggcagtgg gtctgggaca gacttcactc tcaccatcag cagactggag 240
cctgaagact ttgcagtgtt ttactgtcag cagtatggta gttcacctcc cttcactttc 300
ggccctggga ccaaagtgga tatcaaa 327

<210> 266
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 266
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly
1 5 10 15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ile Ser Ser
20 25 30
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu
35 40 45
Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser
50 55 60
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
65 70 75 80
Pro Glu Asp Phe Ala Val Phe Tyr Cys Gln Gln Tyr Gly Ser Ser Pro
85 90 95
Pro Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
100 105

<210> 267
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 267
cagagtgtta tcagcagcta c

21

<210> 268

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 268

Gln Ser Val Ile Ser Ser Tyr

1

5

<210> 269

<211> 9

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 269

ggtgcatcc

9

<210> 270

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 270

Gly Ala Ser

1

<210> 271

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 271

cagcagtatg gtagttcacc tcccttcact

30

<210> 272

<211> 10

<212> PRT

<213> Artificial Sequence

COPY_10314P1-US_SeqListing

<220>

<223> Synthetic

<400> 272

Gln Gln Tyr Gly Ser Ser Pro Pro Phe Thr
1 5 10

<210> 273

<211> 360

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 273

gaagtgcagc tgttggagtc tggggggaggc ttggttcagc cggggggggac cctaagacta 60
tcctgtgcag cctctggatt cacctttagc gcctatgcc a tgagttgggt ccgccaggct 120
ccagggaagg gactggagtg ggtctcttct attaattgttc gtgctggtga cacatactac 180
gcagactccg tgaagggccg cttcaccatc tccagagaca attccaagaa tacgctgttt 240
ctgctgatga acagcctgag agccgaagac acggccgcat attactgtgc gaaagccagg 300
tatagcagca attggggcctt tgacttctgg ggccaggga a ccctgggtcac cgtctcctca 360

<210> 274

<211> 120

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 274

Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15
Thr Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ala Tyr
20 25 30
Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Ser Ile Asn Val Arg Ala Gly Asp Thr Tyr Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Phe
65 70 75 80
Leu Leu Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Ala Tyr Tyr Cys
85 90 95
Ala Lys Ala Arg Tyr Ser Ser Asn Trp Gly Phe Asp Phe Trp Gly Gln
100 105 110
Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 275

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 275

ggattcacct ttagcgccta tgcc

24

<210> 276

<211> 8

<212> PRT

<213> Artificial Sequence

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<223> Synthetic

<400> 276

Gly Phe Thr Phe Ser Ala Tyr Ala

1

5

<210> 277

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

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<400> 277

attaatgttc gtgctggtga caca

24

<210> 278

<211> 8

<212> PRT

<213> Artificial Sequence

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<223> Synthetic

<400> 278

Ile Asn Val Arg Ala Gly Asp Thr

1

5

<210> 279

<211> 39

<212> DNA

<213> Artificial Sequence

COPY_10314P1-US_SeqListing

<220>

<223> Synthetic

<400> 279

gcgaaagcca ggtatagcag caattggggc tttgacttc

39

<210> 280

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 280

Ala Lys Ala Arg Tyr Ser Ser Asn Trp Gly Phe Asp Phe

1

5

10

<210> 281

<211> 339

<212> DNA

<213> Artificial Sequence

<220>

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<400> 281

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atcaactgcc agtccagcca gactatttta cacagctcca acaatcacia ctacttagct 120
tggtatcagc agaaaccggg actgcctcct aaactactca tttactggtc atctaccgg 180
gaatccggag tccctgaccg attcagcggc agcgggtctg ggacagattt cactctcacc 240
atcagcagcc tgcaggctga agatgtggca atttattact gtcaacaata ttctaatact 300
ccgtacactt ttggccaggg gaccaagctg gagatcaat 339

<210> 282

<211> 113

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 282

Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Thr Val Ser Leu Gly
1 5 10 15
Ala Arg Thr Thr Ile Asn Cys Gln Ser Ser Gln Thr Ile Leu His Ser
20 25 30
Ser Asn Asn His Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Leu
35 40 45
Pro Pro Lys Leu Leu Ile Tyr Trp Ser Ser Thr Arg Glu Ser Gly Val

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      50      55      60
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65      70      75      80
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Ile Tyr Tyr Cys Gln Gln
      85      90      95
Tyr Ser Asn Thr Pro Tyr Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile
      100      105      110
Asn

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<210> 283
 <211> 36
 <212> DNA
 <213> Artificial Sequence

<220>
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<400> 283
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<210> 284
 <211> 12
 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 284
 Gln Thr Ile Leu His Ser Ser Asn Asn His Asn Tyr
 1 5 10

<210> 285
 <211> 9
 <212> DNA
 <213> Artificial Sequence

<220>
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<400> 285
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<210> 286
 <211> 3
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<220>

<223> Synthetic

<400> 286

Trp Ser Ser
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<210> 287

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 287

caacaatatt ctaatactcc gtacact

27

<210> 288

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 288

Gln Gln Tyr Ser Asn Thr Pro Tyr Thr
1 5

<210> 289

<211> 345

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 289

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tcctgtggag cctctggatt caccttcaga aattatggca tgcagtgggt ccgccagggt 120
ccaggcaagg ggctggagt ggtgacactt atatcatttg atggaaatga taaatactat 180
gcagactccg tgaagggccg attcaccatc tccagagaca attccaagaa cacgctgttc 240
ctgcaaatga acagcctgag aactgaggac acggctgttt attactgtgc gagagggggg 300
gattttgact actggggaca gggaaccctg gtcaccgtct cctca 345

<210> 290

<211> 115

<212> PRT

<213> Artificial Sequence

COPY_10314P1-US_SeqListing

<220>

<223> Synthetic

<400> 290

Gln	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Val	Val	Gln	Pro	Gly	Arg
1				5				10					15		
Ser	Leu	Arg	Leu	Ser	Cys	Gly	Ala	Ser	Gly	Phe	Thr	Phe	Arg	Asn	Tyr
		20				25						30			
Gly	Met	Gln	Trp	Val	Arg	Gln	Gly	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
	35					40					45				
Thr	Leu	Ile	Ser	Phe	Asp	Gly	Asn	Asp	Lys	Tyr	Tyr	Ala	Asp	Ser	Val
	50				55					60					
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Phe
65				70				75						80	
Leu	Gln	Met	Asn	Ser	Leu	Arg	Thr	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
			85					90					95		
Ala	Arg	Gly	Gly	Asp	Phe	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val	Thr
		100						105					110		
Val	Ser	Ser													
		115													

<210> 291

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 291

ggattcacct tcagaaatta tggc

24

<210> 292

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 292

Gly	Phe	Thr	Phe	Arg	Asn	Tyr	Gly
1				5			

<210> 293

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 293

atatcatttg atggaaatga taaa

24

<210> 294

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 294

Ile Ser Phe Asp Gly Asn Asp Lys

1

5

<210> 295

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 295

gcgagagggg gggattttga ctac

24

<210> 296

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 296

Ala Arg Gly Gly Asp Phe Asp Tyr

1

5

<210> 297

<211> 325

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 297

gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgttgaga cagagtcacc 60

COPY_10314P1-US_SeqListing

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atcacttgcc gggcaagtca ggacattaga aaagatttag gctggtatca gcagaaacca 120
gggaaagccc ctaagcgtct gatctatgct gcatccagtt tacatagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttatta ctgtctacaa cataatagtt accccatgta cacttttggt 300
caggggacca agctggagat caaaa                                     325

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<210> 298

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 298

Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
1				5				10					15		
Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Asp	Ile	Arg	Lys	Asp
			20					25					30		
Leu	Gly	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Arg	Leu	Ile
	35						40					45			
Tyr	Ala	Ala	Ser	Ser	Leu	His	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50					55					60				
Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
65					70					75				80	
Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Leu	Gln	His	Asn	Ser	Tyr	Pro	Met
				85						90				95	
Tyr	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Leu	Glu	Ile	Lys				
			100					105							

<210> 299

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 299

caggacatta gaaaagat

18

<210> 300

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 300

Gln Asp Ile Arg Lys Asp

1

5

<210> 301
 <211> 9
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 301
 gctgcatcc

9

<210> 302
 <211> 3
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 302
 Ala Ala Ser
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<210> 303
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 303
 ctacaacata atagttaccc catgtacact

30

<210> 304
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 304
 Leu Gln His Asn Ser Tyr Pro Met Tyr Thr
 1 5 10

<210> 305

COPY_10314P1-US_SeqListing

<211> 354
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 305
gaagtgcagc tgggtggagtc tggggggaggc ttggtacagc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttgat gattatgcc a tgcactgggt ccggcaagct 120
ccagggaagg gcctggagtg ggtctcaggt atctcttggc atagtggcat cataggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
ctgcaaataa acagtctgag aactgaggac gcggccttgt attattgtgc aaaaattggg 300
agctactttt actttgactc ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 306
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 306
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
20 25 30
Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Gly Ile Ser Trp His Ser Gly Ile Ile Gly Tyr Ala Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80
Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Ala Ala Leu Tyr Tyr Cys
85 90 95
Ala Lys Ile Gly Ser Tyr Phe Tyr Phe Asp Ser Trp Gly Gln Gly Thr
100 105 110
Leu Val Thr Val Ser Ser
115

<210> 307
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
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<400> 307
ggattcacct ttgatgatta tgcc

<210> 308

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 308

Gly Phe Thr Phe Asp Asp Tyr Ala

1

5

<210> 309

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 309

atctcttggc atagtggcat cata

24

<210> 310

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 310

Ile Ser Trp His Ser Gly Ile Ile

1

5

<210> 311

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 311

gcaaaaattg ggagctactt ttactttgac tcc

33

<210> 312

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 312

Ala	Lys	Ile	Gly	Ser	Tyr	Phe	Tyr	Phe	Asp	Ser
1				5					10	

<210> 313

<211> 324

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 313

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ctctcctgca	gggccagtca	gagtgttagc	agcaactact	tagcctggta	ccagcagaaa	120
cctggccagg	ctcccaggct	cctcatctat	ggtgcgtcca	gcagggccac	tggcatccca	180
gacaggttca	gtggcagtgg	gtctgggaca	gacttcactc	tcaccatcag	cagactggag	240
cctgaagatt	ttgcagttta	ttactgtcag	cagtttggta	gctcagggta	cacttttggc	300
caggggacca	acctggagat	caaa				324

<210> 314

<211> 108

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 314

Glu	Ile	Val	Leu	Thr	Gln	Ser	Pro	Gly	Thr	Leu	Ser	Leu	Ser	Pro	Gly
1				5				10						15	
Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Gln	Ser	Val	Ser	Ser	Asn
		20					25					30			
Tyr	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu
		35				40					45				
Ile	Tyr	Gly	Ala	Ser	Ser	Arg	Ala	Thr	Gly	Ile	Pro	Asp	Arg	Phe	Ser
	50				55				60						
Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Arg	Leu	Glu
65				70				75						80	
Pro	Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Phe	Gly	Ser	Ser	Gly
			85				90						95		
Tyr	Thr	Phe	Gly	Gln	Gly	Thr	Asn	Leu	Glu	Ile	Lys				
			100				105								

<210> 315

<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 315
cagagtgtta gcagcaacta c

21

<210> 316
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 316
Gln Ser Val Ser Ser Asn Tyr
1 5

<210> 317
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 317
ggtgctgtcc

9

<210> 318
<211> 3
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 318
Gly Ala Ser
1

<210> 319
<211> 27
<212> DNA
<213> Artificial Sequence

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<220>

<223> Synthetic

<400> 319

cagcagtttg gtagctcagg gtacact

27

<210> 320

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 320

Gln Gln Phe Gly Ser Ser Gly Tyr Thr

1

5

<210> 321

<211> 354

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 321

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tcctgtgcag cctctggaat taccttcagt agttatagca tgaactgggt ccgccaggct 120
ccaggaagg ggctggagt ggtctcatcc attagtacta ggagtagtct cattcactac 180
gcagactcag tgaagggccg attcaccatc tccagagaca acgccaagaa ctcactgtat 240
ctgcaaata acagcctgag agacgaggac acggctgtgt attactgtgc gcgttgggat 300
gcggcagccg cctttgacta ctggggccag ggaaccctgg tcatcgtctc ctca 354

<210> 322

<211> 118

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 322

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly
1 5 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Ile Thr Phe Ser Ser Tyr
20 25 30
Ser Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45
Ser Ser Ile Ser Thr Arg Ser Ser Leu Ile His Tyr Ala Asp Ser Val
50 55 60

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Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
 65 70 75 80
 Leu Gln Met Asn Ser Leu Arg Asp Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Trp Asp Ala Ala Ala Ala Phe Asp Tyr Trp Gly Gln Gly Thr
 100 105 110
 Leu Val Ile Val Ser Ser
 115

<210> 323
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 323
 ggaattacct tcagtagtta tagc 24

<210> 324
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 324
 Gly Ile Thr Phe Ser Ser Tyr Ser
 1 5

<210> 325
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 325
 attagtacta ggagtagtct catt 24

<210> 326
 <211> 8
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<220>
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COPY_10314P1-US_SeqListing

<400> 326

Ile Ser Thr Arg Ser Ser Leu Ile

1

5

<210> 327

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 327

gcgcgttggg atgcggcagc cgcctttgac tac

33

<210> 328

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 328

Ala Arg Trp Asp Ala Ala Ala Ala Phe Asp Tyr

1

5

10

<210> 329

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 329

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atcacttgct gggccagtc gggcattagc agttatttag cctgggtatca gcaaaaacca 120
gggaaagccc ctaagctcct gatctatggt gcatccactt tgcaaagtgg ggtcccatca 180
aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240
gaagattttg caacttattt ctgtcaacag cttaatatgtt acccgctcac tttcggcgga 300
gggaccaagg tggagatcaa a 321

<210> 330

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

COPY_10314P1-US_SeqListing

<223> Synthetic

<400> 330

Asp	Ile	Gln	Leu	Thr	Gln	Ser	Pro	Ser	Phe	Leu	Ser	Ala	Ser	Val	Gly
1				5					10					15	
Asp	Arg	Val	Thr	Ile	Thr	Cys	Trp	Ala	Ser	Gln	Gly	Ile	Ser	Ser	Tyr
			20					25					30		
Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Ile
		35				40						45			
Tyr	Val	Ala	Ser	Thr	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
	50					55				60					
Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Gln	Pro
65					70					75				80	
Glu	Asp	Phe	Ala	Thr	Tyr	Phe	Cys	Gln	Gln	Leu	Asn	Ser	Tyr	Pro	Leu
				85					90					95	
Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu	Ile	Lys					
			100					105							

<210> 331

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 331

cagggcatta gcagttat

18

<210> 332

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 332

Gln	Gly	Ile	Ser	Ser	Tyr
1				5	

<210> 333

<211> 9

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 333

gttgcattcc

<210> 334

<211> 3

<212> PRT

<213> Artificial Sequence

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<223> Synthetic

<400> 334

Val Ala Ser

1

<210> 335

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 335

caacagctta atagttaccc gctcact

27

<210> 336

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 336

Gln Gln Leu Asn Ser Tyr Pro Leu Thr

1

5

<210> 337

<211> 342

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 337

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 tcctgcaagg tttccgata caccctcact gcattatcca tacactgggt gcgacaagct 120
 cctggaaaag ggcttgagt gatgggaaat tttgatcctg gagatgggtga aacaatccac 180
 gcacagaagt tccagggcag agtcaccatg accggggaca catctacaga cacagcctac 240

COPY_10314P1-US_SeqListing

atggaactga gcagcctgag atctgaggac acggccgtgt attattgtgt aggggttact 300
tttgactact ggggccaggg aaccctggtc accgtctcct ca 342

<210> 338
<211> 114
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 338
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Gln Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Ala Leu
20 25 30
Ser Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met
35 40 45
Gly Asn Phe Asp Pro Gly Asp Gly Glu Thr Ile His Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Gly Asp Thr Ser Thr Asp Thr Ala Tyr
65 70 75 80
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Val Gly Val Thr Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val
100 105 110
Ser Ser

<210> 339
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 339
ggatacaccc tcactgcatt atcc 24

<210> 340
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 340
Gly Tyr Thr Leu Thr Ala Leu Ser
1 5

<210> 341
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 341
 tttgatcctg gagatggtga aaca

24

<210> 342
 <211> 8
 <212> PRT
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<220>
 <223> Synthetic

<400> 342
 Phe Asp Pro Gly Asp Gly Glu Thr
 1 5

<210> 343
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 343
 gtaggggtta cttttgacta c

21

<210> 344
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 344
 Val Gly Val Thr Phe Asp Tyr
 1 5

<210> 345
 <211> 321

COPY_10314P1-US_SeqListing

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 345

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gaaattgtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
ctctcctgca gggccagtca gagtgttgcc agcaacttag cctggtacca gcagaaacct 120
ggccaggctc ccaggctcct cctctatggg gcatccacca gggccactgg tatcccagcc 180
aggttcagtg gcagtggggtc tgggacagag ttcactctca ccatcagcag cctgcagtct 240
gaggattttg cactttatta ctgtcagcac tataataact ggccgctcac tttcggcgga 300
gggaccaagg tggagatcaa a                                     321

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<210> 346

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 346

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Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1           5           10          15
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ala Ser Asn
          20          25          30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Leu
          35          40          45
Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
          50          55          60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
65          70          75          80
Glu Asp Phe Ala Leu Tyr Tyr Cys Gln His Tyr Asn Asn Trp Pro Leu
          85          90          95
Thr Phe Gly Gly Thr Lys Val Glu Ile Lys
          100         105

```

<210> 347

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 347

cagagtgttg ccagcaac

18

<210> 348

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 348

Gln Ser Val Ala Ser Asn

1

5

<210> 349

<211> 9

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 349

ggtgcatcc

9

<210> 350

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 350

Gly Ala Ser

1

<210> 351

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 351

cagcactata ataactggcc gtcact

27

<210> 352

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 352

Gln His Tyr Asn Asn Trp Pro Leu Thr

1

5

<210> 353

<211> 345

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 353

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gaggtgcagc ttgtagagtc tgggggagac ttggtacatc ctggcaggtc cctgagactc 60
tcctgtgcag cctctggttt cccctttgat gagtatgccg tgcactgggt ccggcaagtt 120
ccagggaagg gcctggagtg ggtctcaggt attagttgga gtaataataa cataggctat 180
gcggactctg tgaagggccg attcaccatc tccagagaca acgcaaaaaa ctccctgtat 240
ctacaaatga acagtctgag acctgaggac acggcctttt attactgtgc aaaatctgga 300
atctttgact cctggggcca gggaaccctg gtcaccgtct cctca 345

```

<210> 354

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 354

```

Glu Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val His Pro Gly Arg
1          5          10          15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Pro Phe Asp Glu Tyr
20          25          30
Ala Met His Trp Val Arg Gln Val Pro Gly Lys Gly Leu Glu Trp Val
35          40          45
Ser Gly Ile Ser Trp Ser Asn Asn Asn Ile Gly Tyr Ala Asp Ser Val
50          55          60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65          70          75          80
Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Phe Tyr Tyr Cys
85          90          95
Ala Lys Ser Gly Ile Phe Asp Ser Trp Gly Gln Gly Thr Leu Val Thr
100         105         110
Val Ser Ser
115

```

<210> 355

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 355

ggtttccctt ttgatgagta tgcc

24

<210> 356

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 356

Gly Phe Pro Phe Asp Glu Tyr Ala

1

5

<210> 357

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 357

attagttgga gtaataataa cata

24

<210> 358

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 358

Ile Ser Trp Ser Asn Asn Asn Ile

1

5

<210> 359

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 359

gcaaaatctg gaatctttga ctcc

24

<210> 360

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 360

Ala Lys Ser Gly Ile Phe Asp Ser

1

5

<210> 361

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 361

gaaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60
 ctctcctgca gggccagtca gagggttagc agggacttag cctggtacca gcagaaacct 120
 ggccaggctc ccaggctcct catccatggt gcatccacca gggccactgg tatcccagcc 180
 aggttcagtg gcagtgggtc tggggcagag ttcactctca tcatcagcag cctgcagtct 240
 gaagattttg cagtttatta ctgtcagcag tataacaact ggcctctcac tttcggcgga 300
 gggaccaagg tggagatcaa a 321

<210> 362

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 362

Glu Ile Val Met Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
 1 5 10 15
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Arg Asp
 20 25 30
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
 35 40 45
 His Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
 50 55 60
 Ser Gly Ser Gly Ala Glu Phe Thr Leu Ile Ile Ser Ser Leu Gln Ser

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65					70					75				80
Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Tyr	Asn	Asn	Trp	Pro Leu
				85					90				95	
Thr	Phe	Gly	Gly	Gly	Thr	Lys	Val	Glu	Ile	Lys				
			100					105						

<210> 363
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 363
 cagagtgtta gcaggac 18

<210> 364
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 364
 Gln Ser Val Ser Arg Asp
 1 5

<210> 365
 <211> 9
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 365
 ggtgcatcc 9

<210> 366
 <211> 3
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 366
 Gly Ala Ser

1

<210> 367
 <211> 27
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 367
 cagcagtata acaactggcc tctcact 27

<210> 368
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 368
 Gln Gln Tyr Asn Asn Trp Pro Leu Thr
 1 5

<210> 369
 <211> 354
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 369
 gaggtgcact tgggtggagtc tggggggaggc ttggttcagc ctggagggtc cctgagactc 60
 tcctgcgcag cctctggggtt caccttcagt agttatgaaa tgaactgggt ccgccagact 120
 ccagggaagg ggctggagtg gatttcacac attagtagtc gtagtggtat aatatattat 180
 gcagactctg tgaagggccg attcaccatc tccagagaca atgccaagaa ctcactgttt 240
 ctgcaaataga acagtctgag agccgaagac acggctgtct atttctgtgc ggggattact 300
 attttttggtg tccctgaata ctggggccag ggaaccctgg tcaccgtctc ctca 354

<210> 370
 <211> 118
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 370

COPY_10314P1-US_SeqListing

Glu	Val	His	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly	Gly
1				5				10					15		
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Ser	Tyr
			20					25					30		
Glu	Met	Asn	Trp	Val	Arg	Gln	Thr	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Ile
		35					40					45			
Ser	His	Ile	Ser	Ser	Arg	Ser	Val	Ile	Ile	Tyr	Tyr	Ala	Asp	Ser	Val
	50				55					60					
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ala	Lys	Asn	Ser	Leu	Phe
65					70				75					80	
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Phe	Cys
			85					90					95		
Ala	Gly	Ile	Thr	Ile	Phe	Gly	Ile	Pro	Glu	Tyr	Trp	Gly	Gln	Gly	Thr
			100					105					110		
Leu	Val	Thr	Val	Ser	Ser										
			115												

<210> 371
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 371
 gggttcacct tcagtagtta tgaa

24

<210> 372
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 372
 Gly Phe Thr Phe Ser Ser Tyr Glu
 1 5

<210> 373
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 373
 attagtagtc gtagtggttat aata

24

COPY_10314P1-US_SeqListing

<210> 374
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 374
 Ile Ser Ser Arg Ser Val Ile Ile
 1 5

<210> 375
 <211> 33
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 375
 gcggggatta ctatttttgg tatccctgaa tac 33

<210> 376
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 376
 Ala Gly Ile Thr Ile Phe Gly Ile Pro Glu Tyr
 1 5 10

<210> 377
 <211> 321
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 377
 gaaattgtgt tgacacagtc tccagccacc ctgtctttgt ctccagggga aagagccacc 60
 ctctcctgca gggccagtca gagggttagt agttactttg cctgggtatca acagaaacct 120
 ggccaggctc ccaggctcct catctatgat gcgtccagca gggccacagg catcccaacc 180
 aggttcagtg gcagtgggtc tgggacagac ttcactctca ccatcagcag cctagagcct 240
 gaagattttg cagtttatta ctgtcagcaa cgaagcagct ggcctatcac cttcggccag 300

gggacacgac tggagattaa a

321

<210> 378

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 378

Glu	Ile	Val	Leu	Thr	Gln	Ser	Pro	Ala	Thr	Leu	Ser	Leu	Ser	Pro	Gly
1				5				10						15	
Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Gln	Ser	Val	Ser	Ser	Tyr
		20						25					30		
Phe	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu	Ile
		35					40					45			
Tyr	Asp	Ala	Ser	Ser	Arg	Ala	Thr	Gly	Ile	Pro	Thr	Arg	Phe	Ser	Gly
	50					55					60				
Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu	Glu	Pro
65					70					75				80	
Glu	Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Arg	Ser	Ser	Trp	Pro	Ile
				85					90					95	
Thr	Phe	Gly	Gln	Gly	Thr	Arg	Leu	Glu	Ile	Lys					
			100					105							

<210> 379

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 379

cagagtgtta gtagttac

18

<210> 380

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 380

Gln	Ser	Val	Ser	Ser	Tyr
1				5	

<210> 381

<211> 9

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 381

gatgcgtcc

9

<210> 382

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 382

Asp Ala Ser

1

<210> 383

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 383

cagcaacgaa gcagctggcc tacc

27

<210> 384

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 384

Gln Gln Arg Ser Ser Trp Pro Ile Thr

1

5

<210> 385

<211> 351

<212> DNA

<213> Artificial Sequence

COPY_10314P1-US_SeqListing

<220>

<223> Synthetic

<400> 385

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gaggtgcagc tgttggagtc tggggggaggc ttcgtacagc cggggggggtc cctgagactc 60
tcctgtgcag cctctggatt cacctttagt tcctatgcca tgagctgggt ccgccaggct 120
ccaggaagg ggctggagtg ggtctcaatt attagttcta atggtcgtta cacatactat 180
gcagactccg tgaagggccg gttcaccatc tccagagaca attccaagaa cagctgtat 240
ctccaaatga acagcctgag agccgaagac acggccgtct attactgtgc cactgtaact 300
ggggactggg tcgaccctg gggccaggga accctgggtca ccgtctcctc a 351
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<210> 386

<211> 117

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 386

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Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Phe Val Gln Pro Gly Gly
1      5      10      15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
20     25     30
Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35     40     45
Ser Ile Ile Ser Ser Asn Gly Arg Tyr Thr Tyr Tyr Ala Asp Ser Val
50     55     60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
65     70     75     80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85     90     95
Ala Thr Val Thr Gly Asp Trp Phe Asp Pro Trp Gly Gln Gly Thr Leu
100    105    110
Val Thr Val Ser Ser
115
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<210> 387

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 387

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ggattcacct ttagttccta tgcc 24
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<210> 388

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 388

Gly Phe Thr Phe Ser Ser Tyr Ala
1 5

<210> 389

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 389

attagttcta atggtcgtta caca

24

<210> 390

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 390

Ile Ser Ser Asn Gly Arg Tyr Thr
1 5

<210> 391

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 391

gccactgtaa ctggggactg gttcgacccc

30

<210> 392

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

COPY_10314P1-US_SeqListing

<400> 392

Ala Thr Val Thr Gly Asp Trp Phe Asp Pro
1 5 10

<210> 393

<211> 321

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 393

gacatccagt tgaccagtc tccatccttc ctgtctgcat ctgtaggaga cagagtcacc 60
atcacttggt gggccagtca ggacattgac atttcttttag cctgggtatca gcaaaaacca 120
gggaaagccc ctaagctctt gatctatgct gcatccactt tgcaaagtgg ggtcccttca 180
aagttcagcg gcagtggatc tgggacagat ttcactctca caatcagcag cctgcagcct 240
gaagatTTTT caacttatta ctgtcaacaa cttaatagtt acccgatcac cttcggccaa 300
gggacacgac tggacattaa a 321

<210> 394

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 394

Asp Ile Gln Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Trp Ala Ser Gln Asp Ile Asp Ile Ser
20 25 30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45
Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Lys Phe Ser Gly
50 55 60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80
Glu Asp Phe Ser Thr Tyr Tyr Cys Gln Gln Leu Asn Ser Tyr Pro Ile
85 90 95
Thr Phe Gly Gln Gly Thr Arg Leu Asp Ile Lys
100 105

<210> 395

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 395

caggacattg acatttct

18

<210> 396

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 396

Gln Asp Ile Asp Ile Ser

1

5

<210> 397

<211> 9

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 397

gctgcatcc

9

<210> 398

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 398

Ala Ala Ser

1

<210> 399

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 399

caacaactta atagttaccc gatcacc

<210> 400

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic

<400> 400

Gln Gln Leu Asn Ser Tyr Pro Ile Thr

1

5

<210> 401

<211> 267

<212> PRT

<213> Artificial Sequence

<220>

<223> human PRLR ecto-mmH

<400> 401

Met	His	Arg	Pro	Arg	Arg	Arg	Gly	Thr	Arg	Pro	Pro	Pro	Leu	Ala	Leu
1				5					10					15	
Leu	Ala	Ala	Leu	Leu	Leu	Ala	Ala	Arg	Gly	Ala	Asp	Ala	Gln	Leu	Pro
			20					25					30		
Pro	Gly	Lys	Pro	Glu	Ile	Phe	Lys	Cys	Arg	Ser	Pro	Asn	Lys	Glu	Thr
		35					40					45			
Phe	Thr	Cys	Trp	Trp	Arg	Pro	Gly	Thr	Asp	Gly	Gly	Leu	Pro	Thr	Asn
	50					55					60				
Tyr	Ser	Leu	Thr	Tyr	His	Arg	Glu	Gly	Glu	Thr	Leu	Met	His	Glu	Cys
65					70				75					80	
Pro	Asp	Tyr	Ile	Thr	Gly	Gly	Pro	Asn	Ser	Cys	His	Phe	Gly	Lys	Gln
			85					90						95	
Tyr	Thr	Ser	Met	Trp	Arg	Thr	Tyr	Ile	Met	Met	Val	Asn	Ala	Thr	Asn
			100					105					110		
Gln	Met	Gly	Ser	Ser	Phe	Ser	Asp	Glu	Leu	Tyr	Val	Asp	Val	Thr	Tyr
		115					120					125			
Ile	Val	Gln	Pro	Asp	Pro	Pro	Leu	Glu	Leu	Ala	Val	Glu	Val	Lys	Gln
		130				135					140				
Pro	Glu	Asp	Arg	Lys	Pro	Tyr	Leu	Trp	Ile	Lys	Trp	Ser	Pro	Pro	Thr
145					150					155				160	
Leu	Ile	Asp	Leu	Lys	Thr	Gly	Trp	Phe	Thr	Leu	Leu	Tyr	Glu	Ile	Arg
				165					170					175	
Leu	Lys	Pro	Glu	Lys	Ala	Ala	Glu	Trp	Glu	Ile	His	Phe	Ala	Gly	Gln
			180					185					190		
Gln	Thr	Glu	Phe	Lys	Ile	Leu	Ser	Leu	His	Pro	Gly	Gln	Lys	Tyr	Leu
		195					200					205			
Val	Gln	Val	Arg	Cys	Lys	Pro	Asp	His	Gly	Tyr	Trp	Ser	Ala	Trp	Ser
		210				215					220				

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Pro Ala Thr Phe Ile Gln Ile Pro Ser Asp Phe Thr Met Asn Asp Glu
 225 230 235 240
 Gln Lys Leu Ile Ser Glu Glu Asp Leu Gly Gly Glu Gln Lys Leu Ile
 245 250 255
 Ser Glu Glu Asp Leu His His His His His His
 260 265

<210> 402

<211> 472

<212> PRT

<213> Artificial Sequence

<220>

<223> human PRLR ecto-mFc

<400> 402

Met His Arg Pro Arg Arg Arg Gly Thr Arg Pro Pro Pro Leu Ala Leu
 1 5 10 15
 Leu Ala Ala Leu Leu Leu Ala Ala Arg Gly Ala Asp Ala Gln Leu Pro
 20 25 30
 Pro Gly Lys Pro Glu Ile Phe Lys Cys Arg Ser Pro Asn Lys Glu Thr
 35 40 45
 Phe Thr Cys Trp Trp Arg Pro Gly Thr Asp Gly Gly Leu Pro Thr Asn
 50 55 60
 Tyr Ser Leu Thr Tyr His Arg Glu Gly Glu Thr Leu Met His Glu Cys
 65 70 75 80
 Pro Asp Tyr Ile Thr Gly Gly Pro Asn Ser Cys His Phe Gly Lys Gln
 85 90 95
 Tyr Thr Ser Met Trp Arg Thr Tyr Ile Met Met Val Asn Ala Thr Asn
 100 105 110
 Gln Met Gly Ser Ser Phe Ser Asp Glu Leu Tyr Val Asp Val Thr Tyr
 115 120 125
 Ile Val Gln Pro Asp Pro Pro Leu Glu Leu Ala Val Glu Val Lys Gln
 130 135 140
 Pro Glu Asp Arg Lys Pro Tyr Leu Trp Ile Lys Trp Ser Pro Pro Thr
 145 150 155 160
 Leu Ile Asp Leu Lys Thr Gly Trp Phe Thr Leu Leu Tyr Glu Ile Arg
 165 170 175
 Leu Lys Pro Glu Lys Ala Ala Glu Trp Glu Ile His Phe Ala Gly Gln
 180 185 190
 Gln Thr Glu Phe Lys Ile Leu Ser Leu His Pro Gly Gln Lys Tyr Leu
 195 200 205
 Val Gln Val Arg Cys Lys Pro Asp His Gly Tyr Trp Ser Ala Trp Ser
 210 215 220
 Pro Ala Thr Phe Ile Gln Ile Pro Ser Asp Phe Thr Met Asn Asp Glu
 225 230 235 240
 Pro Arg Gly Pro Thr Ile Lys Pro Cys Pro Pro Cys Lys Cys Pro Ala
 245 250 255
 Pro Asn Leu Leu Gly Gly Pro Ser Val Phe Ile Phe Pro Pro Lys Ile
 260 265 270
 Lys Asp Val Leu Met Ile Ser Leu Ser Pro Ile Val Thr Cys Val Val

COPY_10314P1-US_SeqListing

275	280	285
Val Asp Val Ser Glu Asp Asp Pro Asp Val Gln Ile Ser Trp Phe Val		
290	295	300
Asn Asn Val Glu Val His Thr Ala Gln Thr Gln Thr His Arg Glu Asp		
305	310	315
Tyr Asn Ser Thr Leu Arg Val Val Ser Ala Leu Pro Ile Gln His Gln		
325	330	335
Asp Trp Met Ser Gly Lys Glu Phe Lys Cys Lys Val Asn Asn Lys Asp		
340	345	350
Leu Pro Ala Pro Ile Glu Arg Thr Ile Ser Lys Pro Lys Gly Ser Val		
355	360	365
Arg Ala Pro Gln Val Tyr Val Leu Pro Pro Pro Glu Glu Glu Met Thr		
370	375	380
Lys Lys Gln Val Thr Leu Thr Cys Met Val Thr Asp Phe Met Pro Glu		
385	390	395
Asp Ile Tyr Val Glu Trp Thr Asn Asn Gly Lys Thr Glu Leu Asn Tyr		
405	410	415
Lys Asn Thr Glu Pro Val Leu Asp Ser Asp Gly Ser Tyr Phe Met Tyr		
420	425	430
Ser Lys Leu Arg Val Glu Lys Lys Asn Trp Val Glu Arg Asn Ser Tyr		
435	440	445
Ser Cys Ser Val Val His Glu Gly Leu His Asn His His Thr Thr Lys		
450	455	460
Ser Phe Ser Arg Thr Pro Gly Lys		
465	470	

<210> 403

<211> 267

<212> PRT

<213> Artificial Sequence

<220>

<223> monkey (mf) PRLR ecto-mmH

<400> 403

Met His Arg Pro Arg Arg Arg Gly Thr Arg Pro Pro Pro Leu Ala Leu	
1	15
Leu Ala Ala Leu Leu Leu Ala Ala Arg Gly Ala Asp Ala Gln Leu Pro	
20	30
Pro Gly Lys Pro Glu Ile Phe Lys Cys Arg Ser Pro Asn Lys Glu Thr	
35	45
Phe Thr Cys Trp Trp Arg Pro Gly Thr Asp Gly Gly Leu Pro Thr Asn	
50	60
Tyr Ser Leu Thr Tyr His Arg Glu Gly Glu Thr Leu Met His Glu Cys	
65	80
Pro Asp Tyr Ile Thr Gly Gly Pro Asn Ser Cys His Phe Gly Lys Gln	
85	95
Tyr Thr Ser Met Trp Arg Thr Tyr Val Met Met Val Asn Ala Thr Asn	
100	110
Gln Met Gly Ser Ser Phe Ser Asp Glu Leu Tyr Val Asp Val Thr Tyr	
115	125

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Ile	Val	Gln	Pro	Asp	Pro	Pro	Leu	Glu	Leu	Thr	Val	Glu	Val	Lys	Gln
130						135					140				
Pro	Glu	Asp	Arg	Lys	Pro	Tyr	Leu	Trp	Met	Lys	Trp	Ser	Pro	Pro	Thr
145					150					155					160
Leu	Ile	Asp	Leu	Lys	Thr	Gly	Trp	Phe	Thr	Leu	Leu	Tyr	Glu	Ile	Arg
				165					170					175	
Leu	Lys	Pro	Glu	Lys	Ala	Ala	Glu	Trp	Glu	Thr	His	Phe	Ala	Gly	Gln
			180				185						190		
Gln	Thr	Glu	Phe	Lys	Ile	Leu	Ser	Leu	His	Pro	Gly	Gln	Lys	Tyr	Leu
	195						200				205				
Val	Gln	Val	Arg	Cys	Lys	Pro	Asp	His	Gly	Tyr	Trp	Ser	Ala	Trp	Ser
210						215					220				
Pro	Ala	Thr	Phe	Ile	Gln	Ile	Pro	Ser	Asp	Phe	Ile	Met	Asn	Asp	Glu
225					230					235					240
Gln	Lys	Leu	Ile	Ser	Glu	Glu	Asp	Leu	Gly	Gly	Glu	Gln	Lys	Leu	Ile
				245					250					255	
Ser	Glu	Glu	Asp	Leu	His	His	His	His	His	His					
			260					265							

<210> 404

<211> 622

<212> PRT

<213> Artificial Sequence

<220>

<223> full length human PRLR

<400> 404

Met	Lys	Glu	Asn	Val	Ala	Ser	Ala	Thr	Val	Phe	Thr	Leu	Leu	Leu	Phe
1				5					10					15	
Leu	Asn	Thr	Cys	Leu	Leu	Asn	Gly	Gln	Leu	Pro	Pro	Gly	Lys	Pro	Glu
			20					25					30		
Ile	Phe	Lys	Cys	Arg	Ser	Pro	Asn	Lys	Glu	Thr	Phe	Thr	Cys	Trp	Trp
		35					40					45			
Arg	Pro	Gly	Thr	Asp	Gly	Gly	Leu	Pro	Thr	Asn	Tyr	Ser	Leu	Thr	Tyr
	50				55						60				
His	Arg	Glu	Gly	Glu	Thr	Leu	Met	His	Glu	Cys	Pro	Asp	Tyr	Ile	Thr
65					70					75					80
Gly	Gly	Pro	Asn	Ser	Cys	His	Phe	Gly	Lys	Gln	Tyr	Thr	Ser	Met	Trp
			85						90					95	
Arg	Thr	Tyr	Ile	Met	Met	Val	Asn	Ala	Thr	Asn	Gln	Met	Gly	Ser	Ser
			100					105					110		
Phe	Ser	Asp	Glu	Leu	Tyr	Val	Asp	Val	Thr	Tyr	Ile	Val	Gln	Pro	Asp
		115					120					125			
Pro	Pro	Leu	Glu	Leu	Ala	Val	Glu	Val	Lys	Gln	Pro	Glu	Asp	Arg	Lys
		130				135					140				
Pro	Tyr	Leu	Trp	Ile	Lys	Trp	Ser	Pro	Pro	Thr	Leu	Ile	Asp	Leu	Lys
145					150					155					160
Thr	Gly	Trp	Phe	Thr	Leu	Leu	Tyr	Glu	Ile	Arg	Leu	Lys	Pro	Glu	Lys
				165					170					175	
Ala	Ala	Glu	Trp	Glu	Ile	His	Phe	Ala	Gly	Gln	Gln	Thr	Glu	Phe	Lys

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			180					185				190			
Ile	Leu	Ser	Leu	His	Pro	Gly	Gln	Lys	Tyr	Leu	Val	Gln	Val	Arg	Cys
		195					200					205			
Lys	Pro	Asp	His	Gly	Tyr	Trp	Ser	Ala	Trp	Ser	Pro	Ala	Thr	Phe	Ile
		210				215					220				
Gln	Ile	Pro	Ser	Asp	Phe	Thr	Met	Asn	Asp	Thr	Thr	Val	Trp	Ile	Ser
225					230					235					240
Val	Ala	Val	Leu	Ser	Ala	Val	Ile	Cys	Leu	Ile	Ile	Val	Trp	Ala	Val
					245					250				255	
Ala	Leu	Lys	Gly	Tyr	Ser	Met	Val	Thr	Cys	Ile	Phe	Pro	Pro	Val	Pro
			260						265				270		
Gly	Pro	Lys	Ile	Lys	Gly	Phe	Asp	Ala	His	Leu	Leu	Glu	Lys	Gly	Lys
		275					280					285			
Ser	Glu	Glu	Leu	Leu	Ser	Ala	Leu	Gly	Cys	Gln	Asp	Phe	Pro	Pro	Thr
		290				295					300				
Ser	Asp	Tyr	Glu	Asp	Leu	Leu	Val	Glu	Tyr	Leu	Glu	Val	Asp	Asp	Ser
305					310					315					320
Glu	Asp	Gln	His	Leu	Met	Ser	Val	His	Ser	Lys	Glu	His	Pro	Ser	Gln
				325					330					335	
Gly	Met	Lys	Pro	Thr	Tyr	Leu	Asp	Pro	Asp	Thr	Asp	Ser	Gly	Arg	Gly
			340					345					350		
Ser	Cys	Asp	Ser	Pro	Ser	Leu	Leu	Ser	Glu	Lys	Cys	Glu	Glu	Pro	Gln
		355					360					365			
Ala	Asn	Pro	Ser	Thr	Phe	Tyr	Asp	Pro	Glu	Val	Ile	Glu	Lys	Pro	Glu
		370				375					380				
Asn	Pro	Glu	Thr	Thr	His	Thr	Trp	Asp	Pro	Gln	Cys	Ile	Ser	Met	Glu
385					390					395					400
Gly	Lys	Ile	Pro	Tyr	Phe	His	Ala	Gly	Gly	Ser	Lys	Cys	Ser	Thr	Trp
				405					410					415	
Pro	Leu	Pro	Gln	Pro	Ser	Gln	His	Asn	Pro	Arg	Ser	Ser	Tyr	His	Asn
			420					425					430		
Ile	Thr	Asp	Val	Cys	Glu	Leu	Ala	Val	Gly	Pro	Ala	Gly	Ala	Pro	Ala
		435					440					445			
Thr	Leu	Leu	Asn	Glu	Ala	Gly	Lys	Asp	Ala	Leu	Lys	Ser	Ser	Gln	Thr
						455					460				
Ile	Lys	Ser	Arg	Glu	Glu	Gly	Lys	Ala	Thr	Gln	Gln	Arg	Glu	Val	Glu
465					470					475					480
Ser	Phe	His	Ser	Glu	Thr	Asp	Gln	Asp	Thr	Pro	Trp	Leu	Leu	Pro	Gln
				485					490					495	
Glu	Lys	Thr	Pro	Phe	Gly	Ser	Ala	Lys	Pro	Leu	Asp	Tyr	Val	Glu	Ile
			500					505					510		
His	Lys	Val	Asn	Lys	Asp	Gly	Ala	Leu	Ser	Leu	Leu	Pro	Lys	Gln	Arg
		515					520					525			
Glu	Asn	Ser	Gly	Lys	Pro	Lys	Lys	Pro	Gly	Thr	Pro	Glu	Asn	Asn	Lys
		530				535									

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595	600	605
Leu Asp Tyr Leu Asp Pro	Ala Cys Phe Thr His Ser	Phe His
610	615	620

<210> 405
 <211> 31
 <212> PRT
 <213> artificial

<220>
 <223> synthetic

<400> 405

Met His Glu Cys Pro Asp Tyr Ile Thr Gly Gly Pro Asn Ser Cys His
1 5 10 15
Phe Gly Lys Gln Tyr Thr Ser Met Trp Arg Thr Tyr Ile Met Met
20 25 30

<210> 406
 <211> 237
 <212> PRT
 <213> artificial

<220>
 <223> synthetic

<400> 406

Gln Leu Pro Pro Gly Lys Pro Glu Ile Phe Lys Cys Arg Ser Pro Asn
1 5 10 15
Lys Glu Thr Phe Thr Cys Trp Trp Arg Pro Gly Thr Asp Gly Gly Leu
20 25 30
Pro Thr Asn Tyr Ser Leu Thr Tyr His Arg Glu Gly Glu Thr Leu Met
35 40 45
His Glu Cys Pro Asp Tyr Ile Thr Gly Gly Pro Asn Ser Cys His Phe
50 55 60
Gly Lys Gln Tyr Thr Ser Met Trp Arg Thr Tyr Ile Met Met Val Asn
65 70 75 80
Ala Thr Asn Gln Met Gly Ser Ser Phe Ser Asp Glu Leu Tyr Val Asp
85 90 95
Val Thr Tyr Ile Val Gln Pro Asp Pro Pro Leu Glu Leu Ala Val Glu
100 105 110
Val Lys Gln Pro Glu Asp Arg Lys Pro Tyr Leu Trp Ile Lys Trp Ser
115 120 125
Pro Pro Thr Leu Ile Asp Leu Lys Thr Gly Trp Phe Thr Leu Leu Tyr
130 135 140
Glu Ile Arg Leu Lys Pro Glu Lys Ala Ala Glu Trp Glu Ile His Phe
145 150 155 160
Ala Gly Gln Gln Thr Glu Phe Lys Ile Leu Ser Leu His Pro Gly Gln
165 170 175
Lys Tyr Leu Val Gln Val Arg Cys Lys Pro Asp His Gly Tyr Trp Ser

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			180				185				190						
Ala	Trp	Ser	Pro	Ala	Thr	Phe	Ile	Gln	Ile	Pro	Ser	Asp	Phe	Thr	Met		
		195					200					205					
Asn	Glu	Gln	Lys	Leu	Ile	Ser	Glu	Glu	Asp	Leu	Gly	Gly	Glu	Gln	Lys		
	210					215					220						
Leu	Ile	Ser	Glu	Glu	Asp	Leu	His	His	His	His	His	His					
225					230					235							